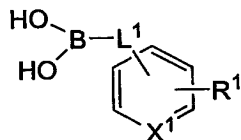


**WHAT IS CLAIMED IS:**

1. A compound having the formula:

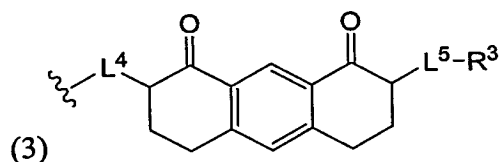
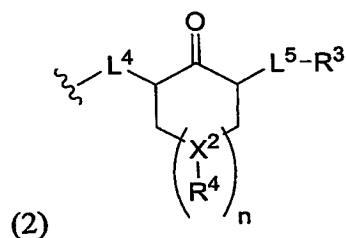
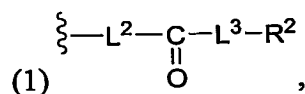


wherein

X<sup>1</sup> is -C= or -N=;

L<sup>1</sup> is a bond, substituted or unsubstituted alkylene, or substituted or unsubstituted heteroalkylene; and

R<sup>1</sup> has the formula:



wherein

n is 0 or 1;

X<sup>2</sup> is -N(R<sup>4</sup>)- or -CH(R<sup>4</sup>)-;

L<sup>2</sup>, L<sup>3</sup>, L<sup>4</sup>, and L<sup>5</sup> are independently a bond, substituted or unsubstituted alkylene, substituted or unsubstituted heteroalkylene, or substituted or unsubstituted heterocycloalkylene; and

R<sup>2</sup>, R<sup>3</sup>, and R<sup>4</sup> are independently hydrogen, substituted or unsubstituted alkyl, substituted or unsubstituted heteroalkyl, substituted or unsubstituted cycloalkyl, substituted or unsubstituted heterocycloalkyl, substituted or unsubstituted aryl, or substituted or unsubstituted heteroaryl,

wherein if X is -C=, L<sup>2</sup> is a bond, L<sup>3</sup> is unsubstituted alkylene, R<sup>1</sup> is (1), and R<sup>1</sup> is para to -L<sup>1</sup>-B(OH)<sub>2</sub>, then R<sup>2</sup> is not substituted or unsubstituted aryl or substituted or unsubstituted heteroaryl.

2. The compound of claim 1, wherein

L<sup>1</sup> is a bond, substituted or unsubstituted C<sub>1</sub>-C<sub>20</sub> alkylene, or substituted or unsubstituted 2 to 20 membered heteroalkylene;

L<sup>2</sup>, L<sup>3</sup>, L<sup>4</sup>, and L<sup>5</sup> are independently a bond, substituted or unsubstituted C<sub>1</sub>-C<sub>20</sub> alkylene, substituted or unsubstituted 2 to 20 membered heteroalkylene, or substituted or unsubstituted 3 to 8 membered heterocycloalkylene; and

R<sup>2</sup>, R<sup>3</sup>, and R<sup>4</sup> are independently hydrogen, substituted or unsubstituted C<sub>1</sub>-C<sub>20</sub> alkyl, substituted or unsubstituted 2 to 20 membered heteroalkyl, substituted or unsubstituted C<sub>3</sub>-C<sub>8</sub> cycloalkyl, substituted or unsubstituted 3 to 8 membered heterocycloalkyl, substituted or unsubstituted aryl, or substituted or unsubstituted heteroaryl.

3. The compound of claim 1, wherein

L<sup>1</sup> is a bond, unsubstituted C<sub>1</sub>-C<sub>10</sub> alkylene, or unsubstituted 2 to 10 membered heteroalkylene;

L<sup>2</sup>, L<sup>3</sup>, L<sup>4</sup> and L<sup>5</sup> are independently a bond, unsubstituted C<sub>1</sub>-C<sub>10</sub> alkylene, unsubstituted 2 to 10 membered heteroalkylene, or unsubstituted 3 to 8 membered heterocycloalkylene; and

R<sup>2</sup>, R<sup>3</sup>, and R<sup>4</sup> are independently hydrogen, substituted or unsubstituted C<sub>1</sub>-C<sub>10</sub> alkyl, substituted or unsubstituted 2 to 10 membered heteroalkyl, substituted or unsubstituted C<sub>3</sub>-C<sub>8</sub> cycloalkyl, substituted or unsubstituted 3 to 8 membered heterocycloalkyl, substituted or unsubstituted aryl, or substituted or unsubstituted heteroaryl.

4. The compound of claim 1, wherein

L<sup>1</sup> is a bond, substituted or unsubstituted C<sub>1</sub>-C<sub>10</sub> alkylene, or substituted or unsubstituted 2 to 10 membered heteroalkylene; and

L<sup>2</sup>, L<sup>3</sup>, L<sup>4</sup>, and L<sup>5</sup> are independently a bond, substituted or unsubstituted C<sub>1</sub>-C<sub>10</sub> alkylene, substituted or unsubstituted 2 to 10 membered

heteroalkylene, or substituted or unsubstituted 3 to 8 membered heterocycloalkylene.

5. The compound of claim 1, wherein  $R^1$  has the formula (1), wherein  $L^2$  is a bond, unsubstituted  $C_1$ - $C_{10}$  alkylene, unsubstituted 2 to 10 membered heteroalkylene, or unsubstituted 3 to 8 membered heterocycloalkylene;  $L^3$  is a bond, unsubstituted  $C_1$ - $C_{10}$  alkylene, unsubstituted 2 to 10 membered heteroalkylene, or unsubstituted 3 to 8 membered heterocycloalkylene; and  $R^2$  is  $R^{21}$ -substituted or unsubstituted  $C_1$ - $C_{15}$  alkyl,  $R^{21}$ -substituted or unsubstituted 2 to 10 membered heteroalkyl,  $R^{21}$ -substituted or unsubstituted  $C_3$ - $C_8$  cycloalkyl,  $R^{21}$ -substituted or unsubstituted 3 to 8 membered heterocycloalkyl,  $R^{21}$ -substituted or unsubstituted aryl, or  $R^{21}$ -substituted or unsubstituted heteroaryl, wherein  $R^{21}$  is a halogen, -OH, -SH, -NH<sub>2</sub>, -CF<sub>3</sub>, -B(OH)<sub>2</sub>, -C(O)NHOH, unsubstituted  $C_1$ - $C_{10}$  alkyl, unsubstituted 2 to 10 membered heteroalkyl, unsubstituted  $C_3$ - $C_8$  cycloalkyl, unsubstituted 3 to 8 membered heterocycloalkyl, unsubstituted aryl, unsubstituted heteroaryl, or -OR<sup>22</sup>, wherein  $R^{22}$  is unsubstituted  $C_1$ - $C_{10}$  alkyl, unsubstituted 2 to 10 membered heteroalkyl, unsubstituted  $C_3$ - $C_8$  cycloalkyl, unsubstituted 3 to 8 membered heterocycloalkyl, unsubstituted aryl, unsubstituted heteroaryl, or -(CH<sub>2</sub>)<sub>q</sub>B(OH)<sub>2</sub>, wherein q is an integer from 1 to 5.
6. The compound of claim 1, wherein  $R^1$  has the formula (1), wherein  $L^2$  is a bond, or unsubstituted 3 to 8 membered heterocycloalkylene;  $L^3$  is unsubstituted  $C_1$ - $C_{10}$  alkylene; and  $R^2$  is  $R^{21}$ -substituted or unsubstituted  $C_1$ - $C_{15}$  alkyl, or  $R^{21}$ -substituted or unsubstituted aryl, wherein  $R^{21}$  is halogen, -OH, -SH, -NH<sub>2</sub>, -CF<sub>3</sub>, -B(OH)<sub>2</sub>, -C(O)NHOH, unsubstituted  $C_1$ - $C_{10}$  alkyl, unsubstituted 2 to 10 membered heteroalkyl, unsubstituted  $C_3$ - $C_8$  cycloalkyl, unsubstituted 3 to 8 membered heterocycloalkyl, unsubstituted aryl, unsubstituted heteroaryl, or -OR<sup>22</sup>, wherein

R<sup>22</sup> is unsubstituted C<sub>1</sub>-C<sub>10</sub> alkyl, or unsubstituted 2 to 10 membered heteroalkyl.

7. The compound of claim 6, wherein

L<sup>2</sup> is a bond or piperazinylene;

L<sup>3</sup> is unsubstituted C<sub>1</sub>-C<sub>3</sub> alkenylene;

R<sup>2</sup> is unsubstituted C<sub>1</sub>-C<sub>15</sub> alkyl, or R<sup>21</sup>-substituted or unsubstituted aryl,

wherein

R<sup>21</sup> is halogen, -C(O)NHOH, unsubstituted C<sub>1</sub>-C<sub>10</sub> alkyl, unsubstituted 2 to 10 membered heteroalkyl, or -OR<sup>22</sup>, wherein

R<sup>22</sup> is unsubstituted C<sub>1</sub>-C<sub>10</sub> alkyl, or unsubstituted 2 to 10 membered heteroalkyl.

8. The compound of claim 1, wherein R<sup>1</sup> has the formula (2) or (3),

wherein

L<sup>4</sup> and L<sup>5</sup> are independently a bond, unsubstituted C<sub>1</sub>-C<sub>10</sub> alkylene, unsubstituted 2 to 10 membered heteroalkylene, or unsubstituted 3 to 8 membered heterocycloalkylene;

R<sup>4</sup> is unsubstituted C<sub>1</sub>-C<sub>10</sub> alkyl, unsubstituted 2 to 10 membered heteroalkyl, unsubstituted C<sub>3</sub>-C<sub>8</sub> cycloalkyl, unsubstituted 3 to 8 membered heterocycloalkyl, unsubstituted aryl, or unsubstituted heteroaryl;

R<sup>3</sup> is R<sup>31</sup>-substituted or unsubstituted C<sub>1</sub>-C<sub>10</sub> alkyl, R<sup>31</sup>-substituted or unsubstituted 2 to 10 membered heteroalkyl, R<sup>31</sup>-substituted or unsubstituted C<sub>3</sub>-C<sub>8</sub> cycloalkyl, R<sup>31</sup>-substituted or unsubstituted 3 to 8 membered heterocycloalkyl, R<sup>31</sup>-substituted or unsubstituted aryl, or R<sup>31</sup>-substituted or unsubstituted heteroaryl, wherein

R<sup>31</sup> is halogen, -OH, -SH, -NH<sub>2</sub>, -CF<sub>3</sub>, -B(OH)<sub>2</sub>, -C(O)NHOH, unsubstituted C<sub>1</sub>-C<sub>10</sub> alkyl, unsubstituted 2 to 10 membered heteroalkyl, unsubstituted C<sub>3</sub>-C<sub>8</sub> cycloalkyl, unsubstituted 3 to 8 membered heterocycloalkyl, unsubstituted aryl, unsubstituted heteroaryl, or -OR<sup>32</sup>, wherein

R<sup>32</sup> is unsubstituted C<sub>1</sub>-C<sub>10</sub> alkyl, unsubstituted 2 to 10 membered heteroalkyl, unsubstituted C<sub>3</sub>-C<sub>8</sub> cycloalkyl, unsubstituted 3 to 8 membered heterocycloalkyl, unsubstituted aryl, unsubstituted

heteroaryl, or  $-(CH_2)_mB(OH)_2$ , wherein  $m$  is an integer from 1 to 5.

9. The compound of claim 1, wherein  $R^1$  has the formula (1) or (2),

wherein

$L^4$  and  $L^5$  are unsubstituted  $C_1$ - $C_{10}$  alkylene;

$R^4$  is unsubstituted  $C_1$ - $C_{10}$  alkyl;

$R^3$  is  $R^{31}$ -substituted aryl, wherein

$R^{31}$  is a halogen,  $-C(O)NHOH$ , unsubstituted  $C_1$ - $C_{10}$  alkyl, unsubstituted 2 to 10 membered heteroalkyl, or  $-OR^{32}$ , wherein

$R^{32}$  is an unsubstituted  $C_1$ - $C_{10}$  alkyl, unsubstituted 2 to 10 membered heteroalkyl, or  $-(CH_2)_mB(OH)_2$ , wherein  $m$  is 1 to 5.

10. The compound of claim 9, wherein  $L^4$  and  $L^5$  are unsubstituted  $C_1$ - $C_3$

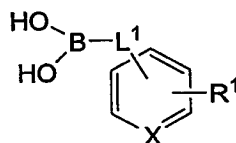
alkenylene.

11. The compound of claim 1, wherein  $R^1$  is para to  $-L^1-B(OH)_2$ .

12. The compound of claim 1, wherein  $X$  is  $-C=$ .

13. The compound of claim 1, wherein  $L^1$  is a bond or methylene.

14. A method of treating a tumor or cancer in a patient in need thereof comprising administering to said patient an effective amount of a compound having the Formula:

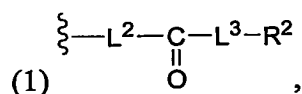


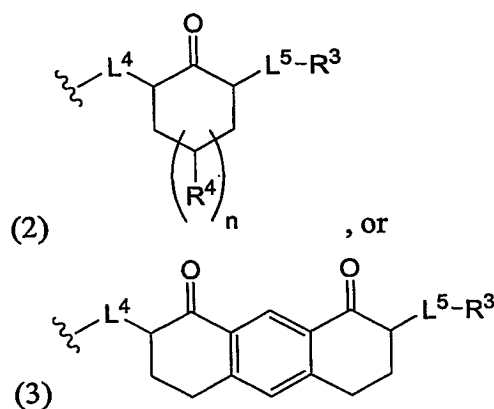
wherein

$X$  is  $-C=$  or  $-N=$ ;

$L^1$  is a bond, substituted or unsubstituted alkylene, or substituted or unsubstituted heteroalkylene; and

$R^1$  has the formula:





wherein

$n$  is 0 or 1;

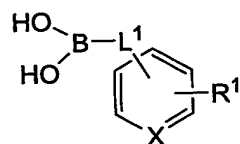
$L^2$ ,  $L^3$ ,  $L^4$ , and  $L^5$  are independently a bond, substituted or unsubstituted alkylene, substituted or unsubstituted heteroalkylene, or substituted or unsubstituted heterocycloalkylene; and

$R^2$ ,  $R^3$ , and  $R^4$  are independently hydrogen, substituted or unsubstituted alkyl, substituted or unsubstituted heteroalkyl, substituted or unsubstituted cycloalkyl, substituted or unsubstituted heterocycloalkyl, substituted or unsubstituted aryl, or substituted or unsubstituted heteroaryl,

wherein if  $X$  is  $-C=$ ,  $L^2$  is a bond,  $L^3$  is unsubstituted alkylene,  $R^1$  is (1), and  $R^1$  is para to  $-L^1-B(OH)_2$ , then  $R^2$  is not substituted or unsubstituted aryl or substituted or unsubstituted heteroaryl.

15. The method of claim 14, wherein said tumor is selected from the group consisting of breast, cervical, stomach, colon, bladder, rectal, liver, pancreatic, lung, cervix uteri, corpus uteri, ovary, prostate, testis, renal, brain/cns, head, neck, throat, anal and oral cancers, eye or ocular cancer, skin melanoma, Ewing's Sarcoma, Kaposi's Sarcoma, basal cell carcinoma and squamous cell carcinoma, small cell lung cancer, mouth/pharynx, esophageal, larynx, kidney and lymphoma, acute lymphocytic leukemia, and acute myelogenous leukemia.

16. A method of inhibiting MDM2 expression in a mammal, comprising administering an amount of a compound effective to inhibit said expression, said compound having the Formula:

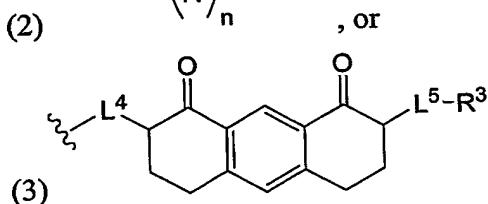
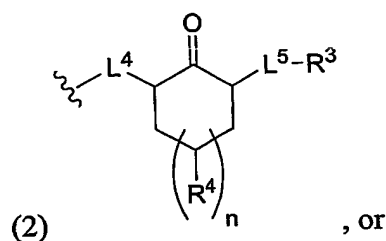
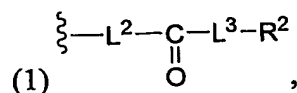


wherein

X is -C= or -N=;

L<sup>1</sup> is a bond, substituted or unsubstituted alkylene, or substituted or unsubstituted heteroalkylene; and

R<sup>1</sup> has the formula:



wherein

n is 0 or 1;

L<sup>2</sup>, L<sup>3</sup>, L<sup>4</sup>, and L<sup>5</sup> are independently a bond, substituted or unsubstituted alkylene, substituted or unsubstituted heteroalkylene, or substituted or unsubstituted heterocycloalkylene; and

R<sup>2</sup>, R<sup>3</sup>, and R<sup>4</sup> are independently hydrogen, substituted or unsubstituted alkyl, substituted or unsubstituted heteroalkyl, substituted or unsubstituted cycloalkyl, substituted or unsubstituted heterocycloalkyl, substituted or unsubstituted aryl, or substituted or unsubstituted heteroaryl,

wherein if X is -C=, L<sup>2</sup> is a bond, L<sup>3</sup> is unsubstituted alkylene, R<sup>1</sup> is (1), and R<sup>1</sup> is para to -L<sup>1</sup>-B(OH)<sub>2</sub>, then R<sup>2</sup> is not substituted or unsubstituted aryl or substituted or unsubstituted heteroaryl.